

Commission hearing on the preparation for RP3

14th December 2016 – Brussels

Discussion document

Introduction

The performance scheme is at the heart of Single European Sky (SES) policy and is a major driver towards performance-based air traffic management (ATM). The performance scheme is approaching the end of the second year of Reference Period (RP) 2. Given the complexity of setting up each Reference Period, preparations have already started for RP3 (as of 2020).

The Commission has requested Helios to support the planning and execution of a stakeholder hearing on the preparation for RP3 of the performance scheme. The work will also include the development of output material to help guide the development of concrete options for RP3.

The hearing will build on the outcome of the stakeholder discussion on the Performance Review Body (PRB) White Paper that took place in Cologne earlier in November and will provide stakeholders with a forum to provide forward-looking, constructive ideas for RP3. This paper has been prepared by Helios to provide information to stakeholders prior to the hearing. It is based on discussions with the Commission, the recent PRB White Paper event in Cologne, the ECORYS presentation on the ex-post analysis of RP1 of the performance scheme and related discussions in the context of the National Supervisory Authority Coordination Platform (NCP).

Overall objectives of the performance scheme

The performance scheme was set up as a key element of the Single European Sky initiative to drive performance improvement of air navigation services (ANS) in Europe. The original objectives of the performance scheme were therefore included as part of the SES framework regulation (549/2004 art.11) to improve the performance of ANS and network functions. Furthermore, the charging scheme set under the SES service provision regulation (550/2004 art. 14 and 15) was directly linked to the performance scheme.

It is this framework that sets the basis for the subsequent performance and charging scheme implementing regulations, which have themselves broadened and increased in scope and content during the first two reference periods. The activities undertaken in preparation for RP3 to-date has suggested that the two schemes are generally viewed as a positive framework, through which improvements have been made, and the focus now is to further refine and adjust them to achieve further performance improvements across the European ATM Network.

However, it should be considered whether the original objectives were fully met, how the performance and charging schemes should best address them and whether the current form of economic regulation is the right translation of the basic requirements of the SES framework and service provision regulations.

The performance and charging schemes create workload for stakeholders and the Commission, therefore their evolution should be sustainable for all stakeholders across the industry and manageable for the Commission and NSAs. For example, is a move to a simpler performance scheme desirable to reduce workload, enabling stakeholders to focus on achieving targets and improving performance?

The duration of the reference period must also be commensurate with its objectives and risks. The first reference period of the performance scheme (RP1) was three years, while RP2 is five years; the length of RP3 is yet to be finalised. The effect of the length of the RP on the predictability of the effects of the performance scheme must be examined.

If a five-year reference period is desirable, the aviation environment has the potential to evolve considerably over the duration of the RP, putting pressure on the achievement of targets and adherence to performance plans. Whilst there are a number of provisions for flexibility within the Implementing Regulation (such as alert thresholds), there may be room for introducing further flexibility to account for variations during an RP.

In turn, it should be considered whether additional flexibility would add further complexity to the current process.

Scope of the framework

It has been suggested that the performance and charging schemes do not sufficiently cover the entire ATM system and focuses too heavily on en route Air Traffic Services (ATS). Some performance indicators already do address areas other than en route services, for example via additional taxi-out times and terminal ANS targets. However, this could be extended and the scheme could move further towards a gate-to-gate approach to targeting and monitoring. While the schemes were primarily introduced to regulate monopoly provision of ANS, there is a need to understand and measure factors that impact on ANSPs and are beyond their control.

Once again, this may add further complexity and this should be considered alongside the expected benefits from such a change.

Driving performance

Regulation

The performance and charging schemes need to be enforceable and work alongside other regulatory instruments to drive performance and improve the efficiency of the ATM system.

The PRB white paper and the ECORYS workshop both noted that there is a lack of power for the national regulators to enforce the targets set within the scheme. It should therefore be considered whether the current framework gives the Commission and NSAs sufficient leverage to actively implement the schemes.

There are also well known and numerous interdependencies between the different areas of the performance scheme. For example, the cost efficiency Key Performance Area (KPA) focuses on reducing determined unit cost; however, the wider effect of this on the operational performance for the other KPAs must be taken into account and understood.

As part of the performance and charging regulations, incentive (and/or penalty) schemes must be fit-for-purpose, provide real motivation to achieve performance targets, and be balanced to ensure that performance is not unduly focused on one KPA at the expense of others. Financial incentives are currently mandatory for the capacity KPA and optional for the environment KPA. It should be considered how incentive schemes could be used to drive performance in RP3, and whether incentive schemes should be mandatory for certain KPAs and KPIs.

Market conditions

It has been suggested that some inefficiency within the ATM system could be addressed by introducing market forces, such as further competition. The performance and charging scheme do encourage competition, particularly in terminal ANS; however, there is room for this to expand.

As defined in Article 3 of the charging regulation (391/2013), after a submission to the Commission has been assessed and passed, a Member State can decide that one or more terminal ANS are subject to market conditions, whereby they are exempt from elements of the regulation. Since the start of the schemes, market conditions have been demonstrated to exist across several European airports. Article 3 also allows for opening of the market for other services, including the provision of CNS.

It is therefore important to consider the extent to which competitive markets should and could be further encouraged, and to identify the barriers to further competition in ANS provision.

Safety KPA

The monitoring and target-setting for safety within the performance scheme is currently focussed on the following leading indicators: the effectiveness of safety management, the application of the severity classification based on the Risk Analysis Tool (RAT) methodology, and the presence of just culture.

The PRB has suggested removing the current KPIs, which are expected to be absorbed into legislative reporting and oversight programmes, and refocusing attention on key risks that display interdependencies with other KPAs. It has elsewhere been suggested that safety is not an appropriate KPA for the performance scheme and should instead be placed under the remit of EASA.

Currently, specific safety performance (ie lagging indicators) is monitored within the performance scheme. It has been suggested that additional targets should be included within the Safety KPA relating to safety occurrences, such as runway infringements and separation minima infringements.

However, targeting lagging indicators may be inappropriate in an industry with established minimum safety standards, and may lead to the underreporting of incidents. A move towards targeting lagging indicators may only be possible with automated reporting.

Capacity KPA

Since the start of the performance scheme the focus on performance improvements has been on the cost efficiency KPA. The capacity KPI was relatively stable throughout RP1, but ATFM delay has increased over 2015 and 2016. Further capacity is required to reduce delay at current bottlenecks, service the forecasted increase in demand and traffic from new airports, as well as cover the network impact of areas of conflict. In recent years, industrial action has created significant delays. Options should be considered in the development of RP3 to help minimise the frequency and impact of industrial action.

Additionally, the matching of capacity to fluctuations in demand is crucial to providing a high-quality and cost-effective service. It is important to fully understand the barriers to matching capacity to demand, on an hourly, daily, monthly and seasonal basis and how the performance scheme can adapt to help ensure sufficient capacity of the European network when it is required.

Given the complexity of the provision of capacity, it should be considered whether the average minutes of en route ATFM delay per flight and of arrival ATFM delay per flight is an appropriate KPI. For example, would other measures better assess capacity at a more detailed level and demonstrate its impact on ATM performance.

Environment KPA

The performance indicators for flight efficiency currently focus on horizontal flight efficiency of both actual route flown (KEA) and the last filed flight plan (KEP). To a large degree, flight plans submitted by airspace users are outside of the control of the ANSPs and the NM and this should be considered further in RP3.

An option could be to remove the horizontal en route flight efficiency of the last filed flight plan (KEP) as a KPI to increase the focus on the actual route flown. It should be considered whether route charges should be levied for the actual route flow rather than the last filed flight plan and this would impact on the environment KPIs.

The PRB White Paper proposed that vertical flight efficiency be included in the performance scheme and that Flexible Use of Airspace (FUA) requires further focus in RP3.

The current KPIs exclude the flight trajectory within 40NM of departure and arrival airports, and therefore focus on inefficiencies in en route airspace. It should be considered whether the effect of other inefficiencies should be included in the Environment KPA to better reflect the environmental impact of flights and enable further improvements; such as a shift to a gate-to-gate view for the environment KPA.

There is currently no monitoring or targeting of noise within the performance scheme and there have been suggestions to include it. However, some stakeholders have expressed concern regarding the appropriateness of monitoring or targeting noise within the performance scheme, as it is an inherently local issue. It should be considered whether noise should be targeted through the performance scheme and how, or whether through other local initiatives.

Cost efficiency KPA

Currently, the cost efficiency KPIs focus on the determined unit cost. It considers staff costs, other operating costs, depreciation, and cost of capital.

It should be considered whether the indicators for cost efficiency continue to be appropriate and whether the cost efficiency calculations are sufficiently transparent. The traffic-related component of the cost efficiency KPI is also an ongoing issue, with ANSPs and airspace users affected by variations in traffic demand.

It has been suggested that the KPI be subdivided into services (eg staff costs and other operating costs), each with an associated and transparent charge.

Within determined unit cost, the interest on capital investments are considered when calculating the unit rate. However, the question remains as to whether capital expenditure should be included in the cost efficiency KPI, and if so, the most appropriate way to do this while still incentivising investment.

Currently, costs that are out of the control of ANSPs (such as pensions) are included within the KPI – it has been suggested that these be removed but given the scale of the costs, how they should be treated should be considered.

Finally, experience has also shown the potential for "gaming" in this performance area in relation to traffic forecasts, cost exemptions, costs postponement and cost allocation (en-route and terminal) that should be removed.

Enabling performance

FABs

It is the PRB's view that *'FABs as implemented, in many instances, bring more fragmentation instead of expected consolidation, blur accountability, generate additional costs, and sometimes act as obstacles, all of which goes against performance and adds significant costs'*. However, the PRB also note that *'...FABs offer considerable opportunity to improve in all KPAs, and... measures to date have offered some change, which is welcomed'*.

The challenge for the performance scheme is how to encourage performance improvements, not only through the implementation of FAB operational plans but also through other multi-state initiatives (such as Borealis, COOPANS etc).

FABs can also offer NSAs an opportunity to share resources and expertise and therefore reduce the workload required of them by the performance scheme.

Network Manager

The PRB's White Paper considers the *'NM function to remain fragmented, with heterogeneous legacy infrastructure frustrating the efforts of the NM to address these issues. This leads to fragmented procurement and maintenance of infrastructure'*. The PRB believes that the situation is aggravated by monopolies, lack of competition, and weaknesses in regulation and oversight.

The NM itself has suggested that its scope within the performance scheme should be extended, and the NM is planning to undertake further work on the development of measures and targets in preparation for RP3. As suggested by the PRB White Paper, the NM could be *'given a stronger role in capacity management (e.g. non-financial or financial incentives)'*.

The potential role of the NM in RP3 should be evaluated, specifically considering the use of the existing powers of the NM during RP1 and RP2, whether its role should be expanded and how the NM can help to drive performance.

The evolution of the performance scheme should also consider how the performance of the NM is measured. Currently, performance focuses on the environment and capacity KPAs. Options include introducing measures of cost effectiveness of the NM role, in particular based on a specific NM unit rate.

Technology

As one of the five pillars of SES, technology was identified as playing a key role in the improvement of the European ATM Network. A number of technologies have been identified within the European ATM Master Plan, which should be implemented over the coming years (up until 2035).

During RP3 (from 2020) the Pilot Common Project (PCP) will be nearing completion, bringing a number of network and local benefits. Furthermore, other technologies outside of the PCP, such as remote towers, are becoming more mature and widespread in their use.

It is important to know what technological developments during RP3 will contribute to performance, in terms of both expected benefits and mature solutions. These will be important in achieving targets in RP3.

How the performance scheme can account for these technological developments should be addressed, and it should be considered whether flexibility should be added into the scheme to account for uncertainty in deployment.

The issue of postponed capital expenditure will also need to be addressed.

Human dimension

As the fifth pillar of SES, the human dimension is a key factor to consider throughout the process of performance improvements. The achievement of the targets set within the performance scheme has a direct effect on these human factors; however, it is often difficult to identify these effects in the planning process.

Some of the current challenges that have been discussed in the industry include the organisation of staffing, change management, maintaining performance when reducing cost and the way in which the capacity KPIs do not take controller workload into account. Some human factors challenges will arise in RP3 from upcoming technology deployments (eg remote towers), and it will be necessary to ensure these are adequately considered.

Process

Target setting

With the exception of the cost-efficiency KPI, which is set at charging zone level, local targets are set at either national level or at FAB level. There would be clear benefits (eg in assessing trade-offs between different KPAs) if all parts of a performance plan related to the same zone.

Therefore, the pros and cons of setting targets at FAB and national level respectively must be considered to define the best approach for RP3.

Currently, local targets are set based on previously defined EU-wide targets; the local targets must be consistent with the EU-wide target. However, there has been widely-expressed concern that the current process does not give sufficient consideration to local factors and that there is a lack of local flexibility on the reference values and traffic forecasts.

It has been suggested by some stakeholders that an iterative process could be used involving local and EU-wide targets which are set concurrently and compared, with adjustments made until local and EU-wide targets are consistent. This would likely require significantly more engagement between the Commission and States/NSAs.

In the case that a 'top-down' process continues to be used for RP3, it should be considered whether EU-wide targets should be set earlier or later than they were in RP2.

It has also been suggested that regulation should allow the Commission/PRB to take a more flexible approach to setting targets, to allow non-linear improvements within an RP or set a target over more than one RP. This would recognise ANSP's long financial planning horizons, and the potential for unforeseen events and external factors to change performance plans. The question is how such a scheme would be enforced.

Engagement and consultation

Coordination and consultation should extend across both the preparation of RP3 and the drawing up of performance plans. Specifically, the former encompasses engagement between the Commission and all stakeholders involved in the performance scheme (NSAs, ANSPs, Airlines, the NM etc); the latter covers consultation with ANSPs and Airlines, and is performed by NSAs.

Many stakeholders have requested more opportunities for engagement with the Commission during the preparation of RP3, in the setting of EU-wide targets, and beyond. It should also be considered whether the consultation performed by NSAs when producing performance plans is adequate and if it could be improved.